Class Exercises

Formulate each of these as a graph-theoretic problem:

- You want to pair people off in the class so that they will study together. You want to have as large a number of people able to be in study groups, but you have the following rules: study groups must have pairs of people who like each other, and no person can be in two study groups.

- You want to have a party and invite as many people as you can to it, subject to (a) they all like you, and (b) they all like each other.